III.

NEW SPECIES OF LEPIDOPTERA FROM BRITISH GUIANA.

BY HARRISON G. DYAR, U. S. Nat. Museum, Washington, D. C.

The following new species occurred among a collection of Lepidoptera made by Mr. C. W. Beebe, Curator of Birds in the New York Zoological Park, in British Guiana in February, 1908.

FAMILY SATURNIIDAE.

Hylesia indurata, new species. (Fig. 41, No. 1.)

8. Antennae yellowish brown; thorax dark brown in the middle, the patagia light purplish; abdomen with numerous yellow hairs above, reddish below, the segments showing dark brown at their bases. Fore wing with the apex acute, subfalcate. Purplish, with a frosty tint, the markings dark purplish brown; a shade on the inner margin at base, indicating the inner line; discal mark large, round, clouded; outer line narrow, straight, more obscure above, especially toward the costa where there is a small shade; a large terminal blotch below the apex. Hind wing with two outer lines, the subterminal one broader. Expanse, 33-43 mm.

9. Fore wing acute at apex, but not subfalcate. Colors as in the male, but more shaded; discal mark large, transverse; two outer lines, both broad, the subterminal the broader, much as on the hind wing. Expanse, 55 mm.

One &, Hoorie,* British Guiana (C. W. Beebe); 10 & & St. Jean, Maroni River, French Guiana, July, 1904 (W. Schaus); 1 &, Geldersland, Surinam River, Dutch Guiana (W. Schaus); 1 Q, St. Jean, French Guiana, July, 1904 (W. Schaus).

Type.—No. 12634, U. S. National Museum.

^{*}Hoorie Gold Mine, on the Hoorie Creek, tributary of the Barama River, British Guiana.

FAMILY ARCTIIDAE.

Zatrephes cardytera, new species. (Fig. 41, No. 2.)

Head and thorax clay-colored, finely irrorate with redbrown; abdomen with a dull red patch in the middle. Fore wing broad, with a prominent rounded angle on the outer margin at veins 4-6. Clay-colored, irrorated with red specks toward the base and olivaceous ones outwardly. A series of rounded hyaline spots between the veins from vein 3 to the subcosta; the three lower ones are confluent, the upper of the three shorter than the others and just at its end is the fourth spot, between veins 6-7: above the base of this last is a small spot. A brown cloud occupies the space between the larger hyaline spots and the margin. An olivaceous spot on the inner margin indicates an inner transverse band, which is continued in the cell to costa; an olivaceous costal mark at the outer third. Fringe narrowly white below the marginal protrusion. Hind wing ochraceouscrimson except along the costal margin, where it is clay-colored. Beneath clay-colored, the hyaline marks of the fore wing repeated. Expanse, 33 mm.

One &, Hoorie, British Guiana (C. W. Beebe).

Type.—No. 12656, U. S. National Museum.

Allied to Zatrephes trilineata Hampson and Z. flavida Hampson, but with larger and more hyaline spots than any species of the genus.

Zaevius, new genus.

Fore wing with vein 2 from before the angle of the cell, 4-5 separate at origin, 6-10 stalked, 10 from beyond 7, 11 from cell; hind wing with vein 2 from well before angle of cell, 3-5 stalked, 4 absent, 6-7 coincident, 8 from before the middle of the cell. Palpi upturned, reaching beyond the middle of the front, the third joint minute. Spurs of the hind tibiae moderate. Male antennae shortly pectinate. Fore wing with the outer margin roundedly excised below the apex.

Zaevius calocore, new species. (Fig. 41, No. 3.)

Head, thorax and abdomen ocher with a brown tint, the abdomen with a spreading anal tuft of the same color; orbits beneath crimson; venter pink, the legs of this color except the tarsi, which are white. Fore wing with a large, triangular, whitish, subhyaline patch on tornus, reaching to vein 5, sending a point to vein 6, and a small detached spot between veins 7-8. Basally of this mark brown with slight ocher admixture, two

Dyar: New Species of Insects.

angular pink marks on inner margin, one near base of costa nearly crossing wing and irregular markings in the cell outwardly to the small subhyaline dot; a long white mark on costa and a bar just before the small dot. Apex ocher, crossed by brown veins. Hind wing subhyaline white, the inner margin broadly and minute discal dot pink; costal margin ocher. Beneath the fore wing has the subhyaline mark repeated, base orange-red, costa purplish, apex ocher as above. Expanse, 47 mm.

One &, Hoorie, British Guiana (C. W. Beebe).

Type.—No. 12657, U. S. National Museum.

FAMILY LITHOSIIDAE.

Thyonæa, new genus.

Structure and venation of *Thyone* Walker, but vein 6 of the fore wing stalked with 7-9.

Type, Thyone perbella Schaus.

Thyonxa dremma, new species. (Fig. 41, No. 4.)

Head yellow; thorax orange brown; abdomen pale yellow. Fore wing orange yellow; a broad median stripe of this color edged on each side with a purplish shade. Veins in the basal and apical areas lined with red. Hind wing yellow with a slight fuscous tint. Expanse, 17 mm.

One &, Hoorie British Guiana (C. W. Beebe).

Type.—No. 12658, U. S. National Museum.

Allied to *Thyonæa perbella* Schaus, but the veins are lined with red instead of blackish and the median band is broader, with its edges less parallel.

Illice biota, new species. (Fig. 41, No. 5.)

Head gray, yellowish around the margins of the vertex and base of antennae. Tegulae yellow, shading to red in front. Thorax gray, the patagia yellowish within. Abdomen crimson, with long lateral and terminal tufts. Fore wing slaty gray, a broad pale yellow stripe along submedian fold from base to termen. Hind wing with the margin strongly emarginate in the middle between the submedian fold and vein 3, the anal angle rounded. Pale crimson, the apex broadly gray. Expanse, 15 mm.

One &, Hoorie, British Guiana (C. W. Beebe).

Type.—No. 12659, U. S. National Museum.

Allied to *Illice minuta* Butler, but with the stripe on the fore wing much broader. *Illice minuta* is known in a single female

1909]

from Colombia and may possibly be the other sex of the present species. These two species should probably form a distinct section of the genus, as it is probable that *minuta* has in the male the same emargination on the outer edge of the hind wing as in the present species.

FAMILY NOCTUIDAE.

Subfamily Acronyctinae.

Neophænis ædemon, new species. (Fig. 41, No. 6.)

Palpi with the third joint long. Head, thorax and fore wings green, variegated with black markings. Fore wing with the ordinary lines geminate, lunulate, the outer line sharply so above, filled above, followed below by white; reniform and orbicular large, doubly black ringed; subbasal line faint, geminate; a black blotch on inner margin across vein 1; a mark on costa mesially, a bar in cell and a blotch on inner margin from vein 2 next to the outer line; a series of subterninal nearly confluent black spots, between which and the margin is a black shading interrupted mesially; a terminal broken black line; fringe spotted with black. Hind wing black with some green above tornus and on fringe. Legs long, pale brownish, the fore legs green and banded with black. Expanse, 30 mm.

One 9, Hoorie, British Guiana (C. W. Beebe).

Type.-No. 12671, U. S. National Museum.

Emarginea empyra, new species. (Fig. 41, No. 7.)

Head white, thorax black with a red-brown tuft behind; abdomen black above, white below, the anal tuft white. Fore wing with the basal half white, a quadrate clay-colored mark basally on inner margin, edged with a fine black line that is thickened at base; a small costal mark similarly bordered with black. A black line limits the white field, slightly inflexed below cell, expanded on costa and including a small white spot. Terminal half of wing brown, with a purplish luster at apex and tornus, dull centrally. A minute white speck on costa before apex. Hind wing soiled whitish, shaded with fuscous on costa and inner margin. Expanse, 17 mm.

One &, Hoorie, British Guiana (C. W. Beebe); 2 & &, St. Jean, Maroni River, French Guiana, March, 1904 (W. Schaus).

Type.-No. 12672, U. S. National Museum.

Hadena niphetodes, new species. (Fig. 41, No. 8.)

Blackish gray with olivaceous shadings. Scales of the thorax very long and spatulate. Fore wing with a broad white band from costa to vein 1 at basal third, edged with black, but not sharply relieved against the general dark color of the wing. Orbicular small, white. Reniform pure white, more or less distinctly joined to costa by a white or olivaceous patch, its lower angle produced inward or detached as a small dot. Outer line black, scarcely relieved, single, crenulate. Subterminal line marked by white or olivaceous spottings. A black terminal line, the fringe slightly intermixed with whitish. Hind wing black, the fringe intermixed with white. Beneath black, frosted with white, especially on hind wing, which has a dark discal annulus and outer line. Expanse, 23 mm.

One \circ , Hoorie, British Guiana (C. W. Beebe); 1 \circ , St. Jean, Maroni River, French Guiana, July, 1904 (W. Schaus).

Type.—No. 12673, U. S. National Museum.

I have placed this species in "Hadena" because the genus in which it falls (the tenth genus on page 13 of vol. viii of Sir G. F. Hampson's "Catalogue of the Noctuidae in the collection of the British Museum") appears not to have been validated by the citation of species under it, and I therefore avoid publishing it in advance of the author's action.

Subfamily Noctuinæ.

Capnodes albicosta, new species. (Fig. 41, No. 9.*)

Head and collar black, with a slight white frosting, especially on posterior edge of collar; thorax rust-red; abdomen blackish. Fore wing rust-red with blackish tint, the costa narrowly yellowish white, ordinary lines slender, blackish the outer with points on the veins, the median space solidly filled with blackish up to the cell and around its end to vein 6. Reniform represented by two separated dots, which, with the orbicular, have small white centers in black annuli. Traces of subterminal line. Fringe blackish, cut by rust-red at the ends of the veins. Hind wing with the mesial area faintly black-shaded as on fore wing, the traces of subterminal line and fringe similar. Beneath dull-colored, thickly irrorated with blackish, the hind wing with blackish discal mark and mesial dentate line. Expanse, 27 mm.

1909]

^{*}The photograph is too dark and does not show the markings.

One δ , Aremu, Little Aremu River, tributary of the Ceryinyi River, British Guiana (C. W. Beebe).

Type.—No. 12674, U. S. National Museum.

Thermesia dorsilinea, new species. (Fig. 41, No. 10.)

Body purplish, darkest on thorax, a continuous dorsal claycolored line from head to tip of abdomen. Wings purplish, the fore wing with a broad inner band of clay-color shaded with brown, especially on its margins and containing a clearer line in its outer third. The band expands in the cell and confusedly joins a similar costal patch at the end of the cell, through which the outer line runs, clay-colored, angled at vein 6, expanding a little and marked with brown below vein 1. Traces of submarginal line, whitish, waved, placed far from the margin. A row of minute terminal black dots. Hind wing with a broad mesial band of mixed brown and clay-color, distinct on the inner twothirds and centered by a brown line in a clearer field. A reniform annular discal mark. Terminal area as on fore wing. Expanse, 27 mm.

One δ , Hoorie, British Guiana (C. W. Beebe); 1 δ , Rockstone, Essequebo River, British Guiana, September, 1904 (W. Schaus).

Type.—No. 12675, U. S. National Museum.

The second specimen has been labelled by Mr. Schaus "not in the British Museum."

FAMILY LASIOCAMPIDAE.

Claphe laudissima, new species. (Fig. 41, No. 11.)

Dark brown, collar and patagia broadly lined with creamy yellow; abdomen lighter brown. Fore wing dark brown, with a slight bronzy tint, a white streak at the base along submedian fold to near the middle of the wing. Costa narrowly creamy yellow from the base to near apex; a straight creamy yellow line crosses the wing from costa near apex to middle of inner margin; a second narrower one starts on the middle of the costa, curves to touch the outer line below the middle of the wing and reaches the inner margin near the base; a yellow streak between these lines above the subcostal vein. A narrow waved subterminal line, incurved opposite the cell, inwardly dentate on vein 3, running inward on vein 2 nearly to the transverse line, and along vein 1 to the base. Hind wing with the costal third dark brown with a distinct white streak at the outer third and beyond it some 1909]

broken white lines; the rest of the wing a little lighter brown and without markings. Beneath light brown, without markings. Expanse, 37 mm.

One &, Hoorie, British Guiana (C. W. Beebe).

Type.—No. 12654, U. S. National Museum.

From the description, this appears nearly allied to *Hydrias laudia* Druce, from Ecuador. Possibly it is the same species, but a number of the finer markings are not mentioned in Druce's description, while the two localities are rather remote. I therefore provisionally consider the species distinct.

FAMILY NOTODONTIDAE.

Rifargia phanerostigma, new species. (Fig. 41, No. 12.)

Head and thorax dark brown, a little intermixed with lighter tints; abdomen brown-gray, the segments lighter at the tips, a vellow lateral tuft at each side at base, the second segment brown at tip. Fore wing dark brown, the basal and terminal areas with a chocolate-brown tint, the middle field more grayish, but dark and nearly uniform. The basal space has a transverse strigose appearance and is limited by the inner line, which is geminate and chocolate-brown filled. Median space rather narrow, narrower on the internal margin than on the costa, containing the elliptical discal mark, which is composed of an outer, broken white ring, faintly bordered within by a narrow brown line, and centered in its lower half by an ocher-yellow dot. Outer line similar to the inner, the terminal space with transverse indistinct striation, the subterminal line fine, pale, irregular, broken, forming minute white dots on the veins and yellowish dashes between them. A submarginal row of intravenular dots, their outer halves dark brown, their inner, yellow-white. An apical rounded, pure white blotch. Hind wing dark brown with the fringe yellowish white except just beyond anal angle. Expanse, 53 mm.

One 9, Hoorie, British Guiana (C. W. Beebe).

Type.-No. 12640, U. S. National Museum.

Only the female is before me, but I think that the generic reference is correct. The species is closely allied to *Rifargia* occulta Schaus and *R. onerosa* Schaus; but neither of these possesses the clear white apical mark on the fore wing, besides other less striking difference.

FAMILY GEOMETRIDAE.

Subfamily Sterrhinae.

Eois costalis, new species. (Fig. 41, No. 13.)

Brownish ocher or clay color. Collar and costal margin of fore wings to outer third dull crimson. Fore wings crossed by four rather broad dull crimson slightly waved bands, the fourth submarginal and the narrowest, not attaining the apex. Fringe concolorous with wing, but blackish at anal angle. Hind wing with four broad bands like the fore wing, the first nearly basal, the submarginal one as broad as the others, but narrowing toward anal angle. Beneath suffused with crimson, the bands nearly lost. Expanse, 12 mm. The antennae have very long cilia.

One &, Hoorie, British Guiana (C. W. Beebe). Type.—No. 12670, U. S. National Museum.

Subfamily Geometrinae.

Racheolopha nivetacta Warren. (Fig. 42, No. 14.)

Female.—Nearly twice the size of the male. Coloration in general similar, but the white fields of both wings broader, the green marginal areas reduced. The white is clearer, more opaque, while the dark strigae are larger and sparser. Abdomen green above, white below, the dorsal series of tufts brown as in the male. Expanse, 40 mm.

One 9, Hoorie, British Guiana (C. W. Beebe).

The species was described from a single male from French Guiana (Proc. U. S. Nat. Mus., xxx, 425, 1906).

FAMILY PYRAIDAE.

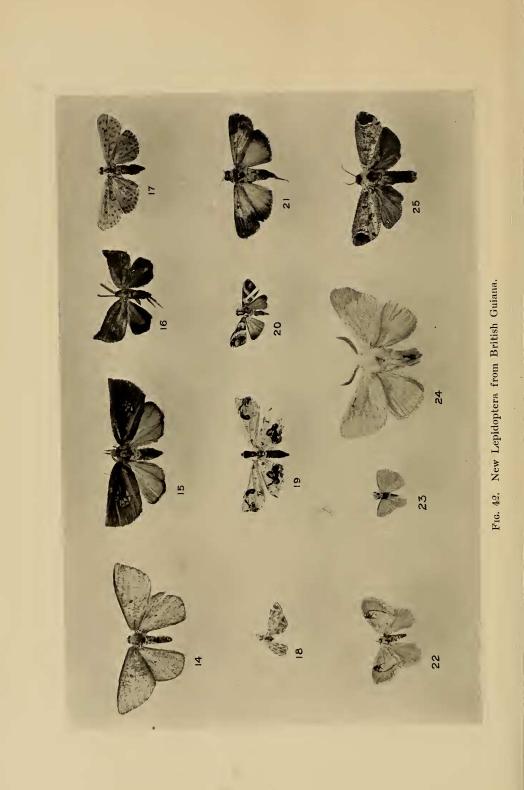
Subfamily Chrysauginae.

Acropteryx opulenta, new species. (Fig. 42, No. 15.)

Head, thorax green, the patagia tipped with chocolate brown. Fore wing bright green, crossed by two scalloped, broken brown lines. A large brown patch runs along the base of the costa, spreads out to fill the space between the lines down to vein 2 and crosses the outer line for a short space. Interspaces between vein 2 and the cell filled in with yellow, both within and without the outer line. Hind wing whitish, the margin narrowly roseate. Expanse, 42 mm.

One 9, Hoorie, British Guiana (C. W. Beebe).





1909]

Type.-No. 12660, U. S. National Museum.

Apparently allied to *Acropteryx arnea* Cramer, which is not before me. The present species, however, has no yellow at the base of the wing as in Cramer's figure, while the outer yellow is here placed close to the edge of the marking instead of near its center.

Saccopleura lycealis, new species. (Fig. 42, No. 16.)

Palpi dark brown. Thorax and abdomen olivaceous brown. Fore wing olivaceous, the costa narrowly bright brown. Lines faint, far apart, pale, the inner a faint trace only, the outer faint, straight. A bright white speck on the costa at the emargination. Inner area of the wing and fringe shaded with purplish. Hind wing with the disk yellow, the costa, outer margin and inner margin broadly black. Beneath the fore wing has the basal field yellow, costa and outer margin broadly dark. Expanse, 26 mm.

One 9, Hoorie, British Guiana (C. W. Beebe).

Type.—No. 12661, U. S. National Museum.

Similar to *Saccopleura catocalis* Ragonot, but the yellow of the hind wing forms a narrow central area, as in some species of *Lyces* before me.

Subfamily Pyraustinae.

Dichocrocopsis, new genus.

Palpi porrect, exceeding the front by more than the length of the head, the second joint thickly but closely scaled, the third naked and bent downward. Maxillary palpi minute. Tongue well developed. Hind tibiae with the spurs long. Fore wing with veins 3-5 arising near the end of the cell, 4 and 5 appromimated at origin, 7 from below upper angle of cell well separated from 8-9, which are stalked, 10, 11 from the cell. Hind wing with 3-5 from near angle of cell, 3-4 approximated at origin, 6 from upper angle of cell, 7 anastomosing with 8.

Dichocrocopsis maculiferalis, new species. (Fig. 42, No. 17.)

Dark ocher yellow, with many rounded brownish black spots; a spot on each side of front below; abdomen with spot on second segment and subdorsal and lateral rows; venter and legs white. Fore wing with three spots in cell and three below on submedian fold, also three smaller ones on inner margin; two spots between veins 2-4 at base; an outer row of seven, excurved below cell; a submarginal row of six and a marginal row. Hind wing with a spot in cell, a mesial row somewhat irregular in course, three spots beyond cell, a submarginal and a marginal row. Expanse, 34 mm.

One ♀, Hoorie, British Guiana (C. W. Beebe). Type.—No. 12665, U. S. National Museum.

Ischnurges bicoloralis, new species. (Fig. 42, No. 18.)

Palpi slightly curved upward, all the joints evenly fringed with scales below, white, banded with ocher. Body, legs and wings marked with white and ocher. Fore wing shining white; subbasal and inner blotches cut into angular segments by the white ground, not attaining costa; a blotch below cell, joining a longitudinal one at end of cell, which touches the narrow erect outer line, and is cut longitudinal by white above vein 5; a blotch on inner margin just within the outer line; a large blotch on outer margin, not attaining the edge; fringe ocher at base, white without. Hind wing with mesial and outer broad bands of ocher, produced outward submedianly; a subapical patch, not attaining the margin and continued narrowly toward anal angle; fringe as on fore wing. Beneath with a fuscous tint, the markings partly repeated in pale fuscous. Expanse, 20 mm.

One φ , Hoorie, British Guiana (C. W. Beebe). Type.—No. 12666, U. S. National Museum.

Subfamily Schenobiinæ.

Hositea, new genus.

Palpi porrect, exceeding the front by about half their length, the second joint roughened with scales below, the third distinct. Maxillary palpi thicker and stouter than the labial palpi, considerably longer than those and with rough squamose vestiture. Tongue very short, curled but not long enough to form a spiral. Antennae flattened, lamellate, similar in the sexes. Spurs of the tibiae long. Fore wing with vein 2 from beyond middle of cell, 3-5 close together from near lower angle of cell, 6 from below upper angle, 7 from angle of cell or very shortly stalked, 8-9 stalked, 10 and 11 from the cell. Hind wing with vein 2 towards end of cell, 3 from the angle, 4-5 slightly above angle and approximate at base, 6 from upper angle of cell, 7 anastomosing with 8. Fore wing pointed at apex, the outer margin roundedly produced in the middle; hind wing with a sharp point at the end of vein 7 and slight points at veins 2 and 4.

I have placed this genus in the Scheenobiinæ on account of the smallness of the tongue; but whether here or in the Pyraus1909]

tinae I know of no other genus with the maxillary palpi so relatively large and exceeding the labial palpi.

Hositea gynæcia, new species. (Fig. 42, No. 19.)

Shining white. Palpi largely black with small white rings only; vertex of head black; disk of thorax black; abdomen with two black spots at the base, a square brown patch on the third segment and part of the second, the fifth to seventh segments metallic black dorsally. Venter and legs white, without mark-Fore wing with some of the scales near the base tipped ings. with brown, forming a small patch; traces of an inner line, showing as some brown scales in the submedian fold: discal mark large, black, centered with a fine blue line with diffused blue scales about it, elliptical and close to the costa in the male, reniform and more distant from the costa in the female; outer line black, starting on costa above discal mark, outwardly oblique to vein 6, bent sharply inward, lost between veins 2 and 4, reappearing below 2, more brownish with a sharp outward bent on submedian fold. A brown cloud shaded with orangle scales at the marginal expansion of the wing and a smaller one at the lower projection of the outer line. A row of terminal black marks, distinct on the upper half of the wing. Hind wing with subbasal marking like fore wing. Discal spot round, large, circled with dark brown, with a yellow eccentric spot, impressed into the mesial line and brown in color in the male, more prominent and dark yellow in the female. Mesial line black costally, brown below, closely followed by a large brown patch, in which are intermixed purple scales in the female only opposite the discal mark. A narrow black line parallel to the irregular termen, the terminal space near anal angle filled in with yellow. Black terminal marks on the projections of the wing. Expanse, 20-34 mm.

Two & &, 1 º, Hoorie, British Guiana (C. W. Beebe); 1 &, St. Jean, Maroni River, French Guiana, July, 1904 (W. Schaus). Type.—No. 12664, U. S. National Museum.

Subfamily Epipaschiinæ.

Incarcha, new genus.

Palpi upturned far above the vertex of the head, smooth, terete, the third joint lanceolate, in the male hollowed on the inner side to receive the long double hair-pencil of the maxillary palpi. Antennae simple in the female, fasciculate in the male with a long basal process reaching back to the end of the thorax, clothed on the sides with very broad curved scales. Fore wing with vein 3 from before angle of cell, 4 and 5 approximate towards base; 6 from upper angle of cell, 7-9 stalked, 10 and 11 from the cell. Hind wings with veins 4 and 5 approximate near origin, 7 anastomosing with 8.

Incarcha aporalis, new species. (Fig. 42, No. 20.)

Fore wing purplish brown shaded with olivaceous, with two broad curved whitish bands. Basal space narrow, dark, its outer margin curved and terminated by a white band which is diffused outwardly. Median space dark, olivaceous, terminated by a straight black line that crosses the middle of the wing obliquely from middle of inner margin to outer third of costa, followed by a white band which is diffused outwardly into olivaceous. Subterminal line black, arcuate, ending in two black streaks subapically and enclosing a little diffuse white on the upper discal venules. A broken black terminal line. Fringe dark. Hind wing fuscous, lighter toward the base, nearly whitish in the male except along the margin. Expanse, 18-24 mm.

One δ and 1 \circ , Hoorie, British Guiana (C. W. Beebe); 1 δ , St. Jean, Maroni River, French Guiana, March, 1904 (W. Schaus); 1 \circ , Cayene, French Guiana, February, 1904 (W. Schaus).

Type.—No. 12662, U. S. National Museum.

Macalla pallidomedia, new species. (Fig. 42, No. 21.)

Body pale brownish. Fore wing dark brown at base and broadly terminally, the middle field diffusedly whitish. Lines thick, black, the inner obscured, the outer dentate, more slender and produced over the median nervules. Two rounded dark discal dots, longitudinally placed. Hind wing whitish, subhyaline, the apex and outer margin fuscous, more broadly so in the female than in the male. Expanse, 28 to 34 mm.

One ♀, Hoorie, British Guiana (C. W. Beebe); 1 ♂, Omai, British Guiana (W. Schaus).

Type.—No. 12663, U. S. National Museum.

The species falls in the section of the genus designated B, a, a^1 by Hampson (Trans. ent. soc. London, 1896, p. 466), which contains Indo-Australian species. I find a note that there was a \circ specimen of this species in the British Museum in 1905 without a name.